

IN THE CLAIMS:

Claims 1 through 53 were previously cancelled. None of the claims have been amended herein. All of the pending claims are presented below. This listing of claims will replace all prior versions and listings of claims in the application. Please enter these claims as previously amended.

Listing of Claims:

1.-53. (Cancelled)

54. (Previously presented) The method of claim 53, wherein the gate dielectric layer is substantially devoid of pitting.

55. (Previously presented) A method of forming a gate stack, comprising:
forming a gate dielectric layer on a silicon substrate;
forming a doped polysilicon layer on the gate dielectric layer;
forming an amorphous metallic silicide film on the doped polysilicon layer;
forming a silicon nitride layer on the amorphous metallic silicide film;
forming at least one silicon cluster within the amorphous metallic silicide film; and
dispersing the at least one silicon cluster.

56. (Previously presented) The method of claim 55, wherein forming at least one silicon cluster within the amorphous metallic silicide film comprises crystallizing the amorphous metallic silicide film.

57. (Previously presented) The method of claim 55, wherein forming at least one silicon cluster within the amorphous metallic silicide film comprises exposing the amorphous metallic silicide film to at least one heat cycle.

58. (Previously presented) The method of claim 55, wherein forming the amorphous metallic silicide film on the doped polysilicon layer comprises forming the amorphous metallic silicide film from a metal silicide selected from the group consisting of tungsten silicide, cobalt silicide, molybdenum silicide, and titanium silicide.

59. (Previously presented) The method of claim 55, wherein forming at least one silicon cluster within the amorphous metallic silicide film comprises at least one of annealing the amorphous metallic silicide film and forming the silicon nitride layer at a temperature greater than approximately 600°C.

60. (Previously presented) The method of claim 55, wherein forming the silicon nitride layer on the amorphous metallic silicide film comprises forming the silicon nitride layer at a temperature below about 600°C.

61. (Previously presented) The method of claim 60, wherein forming at least one silicon cluster within the amorphous metallic silicide film comprises annealing the amorphous metallic silicide film.

62. (Previously presented) The method of claim 60, wherein forming the silicon nitride layer on the amorphous metallic silicide film comprises forming the silicon nitride layer by chemical vapor deposition, sputtering, or a spin-on technique.

63. (Previously presented) The method of claim 60, wherein forming the silicon nitride layer on the amorphous metallic silicide film comprises forming the silicon nitride layer by plasma-enhanced chemical vapor deposition.

64. (Previously presented) The method of claim 55, further comprising:
forming and patterning a photoresist layer on the silicon nitride layer;
etching the silicon nitride layer, the amorphous metallic silicide film, and the doped polysilicon
layer; and
removing the photoresist layer.